ABSTRACT

In a voice activity detection (VAD) device a method for defining tone signals comprises defining a threshold for zero amplitude change, calculating a zero crossing rate of a signal, extracting a set of parameters from a plurality of duration periods of the signal, defining a tolerance threshold between the plurality of duration periods when a zero amplitude change occurs, calculating a maximum difference between the plurality of duration periods, and comparing the maximum difference with the threshold. The method is implemented in the International Telecommunications Union (ITU) recommendation G.729 Annex B VAD.